

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP 03/10031

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H01B7/08

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 616 717 A (LUETZOW EDWIN J) 14 October 1986 (1986-10-14) column 3, line 50 -column 10, line 39; figures 1-3 -----	1-12
A	EP 0 590 694 A (YAZAKI CORP) 6 April 1994 (1994-04-06) column 5, line 14 -column 12, line 11; figures 1-16 -----	1-12

Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
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- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the International search report
20 February 2004	02/03/2004
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Demolder, J

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Information on patent family members

International application No

PCT/EP/03/10031

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
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EP 0590694	A	06-04-1994	JP	2174012 A		05-07-1990
			JP	2900342 B2		02-06-1999
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			DE	68927092 D1		10-10-1996
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			PH	27433 A		21-06-1993
			PT	92704 A ,B		29-06-1990
			US	5010642 A		30-04-1991